DOCUMENT RESUME

ED 415 262 TM 027 952

AUTHOR Bauer, Scott C.; Bogotch, Ira E.
TITLE An Analysis of the Relationships between Site Council Resources, Council Practices, and Outcomes.
PUB DATE 1997-11-00
NOTE 30p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (26th, Memphis, TN, November 12-14, 1997).
PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Educational Administration; Elementary Secondary Education; Factor Analysis; *Participative Decision Making; Path Analysis; *Resource Allocation; *Satisfaction; *School Based Management; School Restructuring; Urban Schools
IDENTIFIERS Stakeholders

ABSTRACT

Path analysis was used to test the relationships between the resources provided to site councils in site-based management (such as administrative support for site-based management), council communication and decision making practices, and perceived outcomes in terms of effectiveness and stakeholder satisfaction. Data were collected form 12 schools in a Midwestern city that had implemented site-based management. A survey of council members, including staff, parents, and community members, yielded 133 responses (64%), 87 of which were from elementary schools and 44 from secondary schools. Results of a factor analysis indicated that three factors emerged as aspects of council support, the factors of council capacity, support from higher authorities, and council authority. Three factors, scope, formal structure, and decision-making process, emerged as independent factors related to communication and decision making practices of site-based teams. Three factors related to effectiveness were defined as effectiveness in providing influence, effectiveness in improving decision making, and effectiveness in improving educational services. Factors related to decision making and communications practices had significant direct effects on outcomes, while factors related to the resources provided to site-based teams did not. Resources provided to site councils primarily affected perceived effectiveness and satisfaction through the factors related to site council practices. (Contains 33 references.) (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 415 262

An Analysis of the Relationships between Site Council Resources, Council Practices, and Outcomes

Scott C. Bauer, Ph.D. Ira E. Bogotch, Ed.D.

Educational Leadership, Counseling, and Foundations

University of New Orleans

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Scott Bauer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Paper presented at the Annual Meeting of the Mid-South Educational Research Association

November, 1997

Running head: SITE COUNCIL RESOURCES, PRACTICES

TM027952

BEST COPY AVAILABLE

An Analysis of the Relationships between Site Council Resources, Council Practices, and Outcomes

There is considerable skepticism regarding whether restructuring decision making can fulfill the promise of promoting school improvement (Ogawa and White, 1994; Malen and Ogawa, 1992). Studies show that there is seldom an *explicit* connection between the implementation of site based management and student performance and achievement (Cohen, 1988; Murphy and Beck, 1995; Taylor and Bogotch, 1994). There is mixed support at best for the connection between the implementation of site based management and *intermediate* benefits such as improved staff morale, stakeholder influence, and the use of quality planning practices (see, for example, David, 1989; Lindquist and Mauriel, 1989; Malen, Ogawa, and Kranz, 1990b).

The general consensus in the literature is that districts and schools seldom fully implement site based systems (Marsh, 1994; Wohlstetter and Odden, 1992). Districts rush to implement site based management without considering what it takes to make the transition from traditional decision making structures (Glickman, 1990). Issues of "insufficient capacity" are often cited as explaining the failure of site based management. "Capacity" generally refers to district support for site councils in terms of providing authority, training, time, information and other resources necessary to ensure successful site team operations.

The literature on site based management has been criticized in many regards. First, even as researchers assert that site based management is poorly defined and that there is no single, best approach to implementing the process, a single model tends to be stressed (Bauer, in press). This model defines site based management as devolving authority over

issues relating to budget, staffing, and certain aspects of curriculum to the school site, normally to a council made up of the building principal, teachers, other school staff and parents. Second, there are few systematic studies of the implementation of collaborative decision making processes. Much of the literature still consists of advocacy pieces associated with a particular school or district's implementation of the process, plan descriptions, or anecdotal accounts of "what works" (Malen, Ogawa, and Kranz, 1990a). Studies seldom address the implementation process itself (Miles and Louis, 1990; Cotton, 1993), focusing instead on reviewing the progress of existing extant programs. Thus, the actual *process* of site based decision making is treated as a "black box" by researchers (Sharpe, 1996).

Even as scholars recommend that the emphasis of research must shift to a focus on site based management as *a process to be designed* (Mohrman, 1994; Wohlstetter and Mohrman, 1994), there is no commonly accepted vocabulary for describing site based management systems thoroughly in terms of their design. Theoretical models suggest a logic of school based management involving stakeholders in decision making ("involvement") or in implementing site based management ("SBM") which connect to a complex web of processes and outcomes (see, for instance, Murphy and Beck, 1995; Malen, Ogawa and Kranz, 1990b). Left unspecified are the actual practices of "involvement" in site based management, i.e., empirical studies describing exactly what site teams do, how they are configured, or how they operate.

Shedd (1987), and later Shedd and Bacharach (1991), described collaborative decision making processes in terms of four broad dimensions: (1) **scope**, referring to the

range of issues site council participants discuss; (2) **formal structure**, including composition and representativeness of site teams; (3) **decision making process**, dealing with how site teams make decisions, and, (4) **support**, referring to issues typically regarded as "capacity," i.e., administative support, information, time, training, and other resources.

These four dimensions were not empirically tested, nor was the embedded logic or sequence among these dimensions specified. The framework treated scope, structure, process and support as four equally important dimensions for describing the design and practice of site based management. Both issues were addressed by Bauer (1996, 1997), who developed empirical measures of Shedd's dimensions and hypothesized that the dimension related to support should be considered separately from scope, structure and process. Specifically, he postulated that support deals with the resources *provided to* site teams and is associated with the institutional context of site based management, while scope, structure and process deal directly with the *communication and decision making practices* of site teams. This is consistent with Weiss's (1995) treatment of the institutional context and culture as distinct from the internal processes described as information, ideology and interest; Murphy and Beck's (1995) conceptualization of school/organization context as separate from decision actors, process and content; and recent empirical work on reculturing (Wonycott-Kytle and Bogotch, 1997) which differentiates between reflecting on, questioning of, and development of practices from the changing role of administrators.

In the earlier analysis, Bauer (1997) showed that the scope, structure, process and support dimensions could be operationalized; survey data were used to construct factors relating to these dimensions. Regression analysis was then used to test whether measures of

scope, structure and process have predictive power in explaining outcomes relating to the effectiveness of site based management. Results showed that factors relating to the internal workings of site councils explain important outcomes, and that the relationship between site council practices and outcomes holds up when controlling for the more often cited predictors of site based management outcomes, that is, issues relating to support. When entered into regression equations together, measures relating to communication and decision making practices proved more robust than those relating to support (i.e., the resources received by site based teams).

While this analysis affirmed the importance of factors relating to decision making and communication practices, in the face of a general consensus in published research on the importance of the resources available to site teams and the common sense notion that issues relating to capacity would influence team performance, it seems unlikely that the resource factors would be largely unrelated to perceived outcomes. Theory would suggest, instead, that the resources **and** site council practice may themselves be related, or they may be related to common antecedent variables not included in the original model, thereby explaining why multiple regression fails to provide an adequate assessment of the model.

In this paper we use path analysis to test the relationship between the **resources** provided to site councils (e.g., administrative support for site based management, site team authority), **council communication and decision making practices** (scope, structure, and support), and **perceived outcomes** (e.g., effectiveness of site based management in enhancing stakeholder influence, satisfaction with the site based team). Building on the earlier analysis, we test a model that treats variables relating to resources as antecedent

factors and those relating to practice as intermediate factors, each hypothesized to contribute to perceived outcomes.

Methodology

Sample

The data used in this study were collected as a part of an interim evaluation of the site based management pilot project in Metro,[1] a Midwestern city that had implemented its site based pilot project three years prior to the evaluation. Initially, eight of Metro's schools had been involved in the pilot. One year prior to the study, four additional pilot schools were added to the SBM pilot, for a total of twelve schools in the sample.

Among the presenting problems at Metro were that several of the site councils felt "stalled." There was a high level of reported distrust of the site based decision making process and of the central office's motives in supporting site based management. Most of the twelve councils had experienced some difficulty in sustaining the process, while several councils had even temporarily ceased operations at some point during the pilot to overcome some hurdle.

Metro took a very typical approach in introducing site based management. The central administration determined that it would be beneficial to establish a pilot project in decentralized decision making, selected pilot schools, provided some rudimentary training in group process skills for key stakeholders in these schools, but otherwise left it up to each school to design their own site based processes. A few teams took the absence of rules as a

---

[1]"Metro" is a pseudonym.

sign of autonomy, and developed their own "rules of the game." Others saw the absence of direction as "a gotcha," a lack of sincerity on the part of the school system and a "potential trap." They suspected that some time down the road, whatever they did would be overruled. In either case, as a result of the ambiguity, the teams were forced to spend an enormous amount of time debating their rules of operation instead of tackling issues relating to student performance and achievement. In the worst case scenario, this resulted in power struggles, a pre-occupation with "adult issues," and an opportunity for hidden agendas to be played out.

In this district, ambiguity was built into the pilot program, resulting in a wide variation in perceptions of the purposes (or motives) associated with site based management and the practices used to operationalize the process. Of course, this is hardly an isolated case; districts often assume that it is impossible to identify such "rules of the game" as what authority site teams ought to have, what topics they might concentrate on, and who ought to serve on teams and how they should be selected (McGonagill, 1993). In many ways, this makes Metro an ideal setting for the investigation of the relationships among site team decision making practices and outcomes.

A survey instrument was created to examine the internal workings of site councils. All site council members were surveyed, including staff, parents, and community members. Twelve school site councils were involved: four secondary schools and eight elementary schools. A total usable sample of 133 surveys were returned from a total of 208 distributed, for a response rate of 64%. From this total, 87 surveys (64%) were from elementary site council members and 44 were from secondary site council members (36%). Analysis revealed that the pattern of rèsponses from among the stakeholder groups does not show a

bias toward any particular group.

Scale Development

Survey items were constructed to tap participants' perceptions of elements of scope, structure, process and support in order to develop measures related to site team operations. Factor analysis was used to determine whether the items measuring site team practices and support would break down into the dimensions represented in the conceptual framework. In conceptually separating support from site team practices, Bauer (1997) conducted two factor analyses on these dimensions. Additionally, factor analysis was conducted to construct scales relating to the perceived effectiveness of site based management.

Support factors

Metro respondents were asked to rate the adequacy of various conditions that may affect the work of the site council (1=very inadequate, 2=somewhat inadequate, 3=somewhat adequate, 4=very adequate). Relying on the descriptive literature and past work on the conditions and resources of teaching (Bacharach, Bauer, and Shedd, 1986), it was expected that five factors would emerge from the analysis: 1) time resources, 2) council member capacity, 3) building level administrative support, 4) support from higher authorities, and 5) decision making authority. Instead, results from the factor analysis indicated that support emerged as three independent factors. The first factor includes the following items:

a. The time available for the site council to meet.

b. The time available to communicate with others about council decisions.

c. The time available to implement council decisions.

d. The team-building and consensus-building skills of those who facilitate or

lead council meetings.

e. Council members' skills in communication and decision making.

f. Support from building administrators.

g. Support from staff not on the council.

h. The recognition and respect site council members receive for their efforts.

This factor, labeled **council capacity**, includes all items related to issues that reside at the school site. Building level stakeholders and the site council can be expected to have significant influence over these resources. They are largely in the council's control or in the control of stakeholders at the school, in contrast to resources that may be provided from the school system or an outside agent.

The second factor represents items relating to **support from higher authorities**, and it includes the following three items:

i. Support from the school board.

j. Support from the superintendent.

k. Support from central administration in general.

This factor will be referred to as **administrative support**. It is interesting to note that issues relating to building level support and central office support load into separate factors, and that support from building administrators loads with issues generally related to building resource issues and staff support. Perhaps this relates to the "us versus them" sentiment existing in Metro (and many other districts), evident in the suspicion that site based management may be "a trap."

The final support dimension, which will be called **authority**, includes the following

survey items:

l. The council's access to information it needs to make decisions.

m. The site council's authority to decide what issues it will address.

n. The site council's authority to implement decisions.

It is interesting that the survey question dealing with access to information loads with the two items relating directly to authority. Perhaps respondents recognize that real decision making authority requires access to timely and accurate data.

Site team practices

In a separate factor analysis, items relating to communication and decision making practices of site based teams emerged as three independent factors as hypothesized, measuring **scope, formal structure, and decision making process**. To tap these issues, respondents were asked to rate the accuracy of various statements about their school site council (1=very inaccurate, 2=somewhat inaccurate, 3=somewhat accurate, 4=very accurate). The first factor represents **scope**, and includes the following items:

a. Site council members and those in authority agree on what kinds of decisions the council may and may not make.

b. Site council members have a clear sense of the goals they want to achieve.

c. The site council makes effective use of research bearing on issues it addresses.

d. The site council is creative in how it addresses issues.

e. The site council has real influence on issues of importance.

As hypothesized, these items deal with issues relating to the power council members believe they have, their sense of council members' agreement on goals, and their sense of whether

council members and those in authority agree on the decisions site councils may and may not make. It is interesting that items relating to perceived decision making capability load here. Specifically, the items dealing with whether members feel that they effectively use research and are creative in their decision making are grouped with issues of goal consensus and authority. Thus, it appears that this factor taps a dimension that deals not only with what councils may decide, but also some elements of how well they believe they engage in their decision making responsibilities.

The second factor, **formal structure**, includes the following items:

f. Site council activities and those of other committees are well coordinated.

g. All members of the site council have an equal opportunity to be involved in decisions.

h. The site council keeps those who might be affected by decisions informed of its progress.

i. The site council gives those who might be affected by decisions opportunities to have input.

j. The site council membership is representative of the staff in the building.

These items deal with issues of coordination, both in terms of internal council activities and relations with stakeholders in the school community. Included here is whether site council members feel that the council is representative of the school community, an issue that survey comments show to be an important issue in Metro, as well as the perceived openness of the site based decision making process.

The final scale deals with **decision making process**, and includes six items:

k. Members of the site council listen to each other and are prepared to change their opinions.

l. Members of the site council trust one another.

m. Site council members communicate openly and honestly during meetings.

n. Even when members disagree, they focus on what they believe to be best for students.

o. Members support site council decisions outside the council meetings.

p. The site council takes responsibility for its decisions.

All of these items relate to communication and decision processes directly, that is, they relate to how council members interact with one another. Issues relating broadly to trust, fairness, and personal motives group into this factor.

Taken as a group, these three factors represent the internal working of site based councils; these are precisely the types of issues that have been neglected in the research on site based management. They relate directly to the design and practice of site based management: Councils that do a good job of defining their rules of operation may be said to have dealt with issues of scope, structure, and process. Design, once enacted, may be thought of as reflecting the practice of site based management.

Outcome measures

Two sets of questions were included in the Metro survey to measure outcomes of site based management. We relied on respondents' self-report of the effectiveness of site based management and their satisfaction with the pilot program rather than measures relating directly to their decision making or student performance and achievement. Preferably, the

efficacy of site based management would be judged by examining the extent to which issues of student performance and achievement are affected by the site based process, but for the present, perceptual data will have to suffice in constructing initial models relating site team operations to outcomes.

The items dealing with the perceived effectiveness of site based management include many of the widely cited benefits of site based management, such as the notion that it promotes trust and enhanced stakeholder influence, as well as explanations relating to improved quality of decisions, innovation, and educational services (see, for example, Murphy, 1991; Glickman, 1993; Hill, Bonan, and Warner, 1992; Malen, Ogawa, and Kranz, 1990b; Murphy and Beck, 1995). Respondents were asked to rate the effectiveness of site based management in terms of the various outcomes (1=very ineffective, 2=somewhat ineffective, 3=somewhat effective, 4=very effective). Three factors relating to effectiveness emerged. The first, **effectiveness in providing influence,** includes the following items:

a. Providing those who are directly involved on councils influence over decision-making.

b. Providing teachers and other school staff influence over decision-making.

c. Providing parents influence over decision-making.

The second factor deals with **effectiveness in improving decision making**, and includes these items:

d. Promoting cooperation and trust among administrators and school staff.

e. Resolving problems that affect teaching, working, and learning conditions.

f. Enhancing the quality of decisions made in the school.

The final effectiveness scale deals with **effectiveness in improving educational services**, which inludes the following three questions:

g. Promoting innovation

h. Satisfying public expectations for reform.

i. Improving the education that students receive.

Two additional outcome items were included in the survey, dealing with respondent's perceived **satisfaction with site based management**. These were considered to be summary variables. The specific questions were, 1) Overall, how satisfied are you with your site-based council's performance?, and 2) Overall, how satisfied are you with the district's site-based management program? These variables were rated on a ten point scale, with ten representing "very satisfied" and one representing "very dissatisfied."

Table 1 displays the number of valid responses, means, and standard deviations for the resource, design, and outcome measures. For each scale, Cronbach's alpha was computed and is included on this table.

TABLE 1 -- DESCRIPTIVE STATISTICS OF RESOURCE, DESIGN AND OUTCOME MEASURES

Variable	n	mean	standard deviation	Cronbach's alpha
Support Factors:				
Council capacity	124	2.95	.59	.8663
Administrative support	128	2.52	.87	.9189
Authority	126	2.84	.73	.8308
Design Factors:				
Scope	126	2.73	.90	.8750
Structure	127	3.16	.71	.8516
Process	128	3.25	.74	.9154
Outcome Measures:				
Providing influence	126	2.76	.85	.9116
Improving decision making	130	2.78	.84	.8942
Improving educational svces	130	2.65	.79	.8909
Satisfaction with council	130	6.52	2.73	--
Satisfaction with program	130	5.35	2.58	--

Model

To test the relationships between support factors, factors relating to site team practice, and perceived outcomes, we developed a path model treating support factors as inputs and factors relating to site team practice as intermediate variables, each contributing to the perceived outcomes of site based management (see Figure 1).

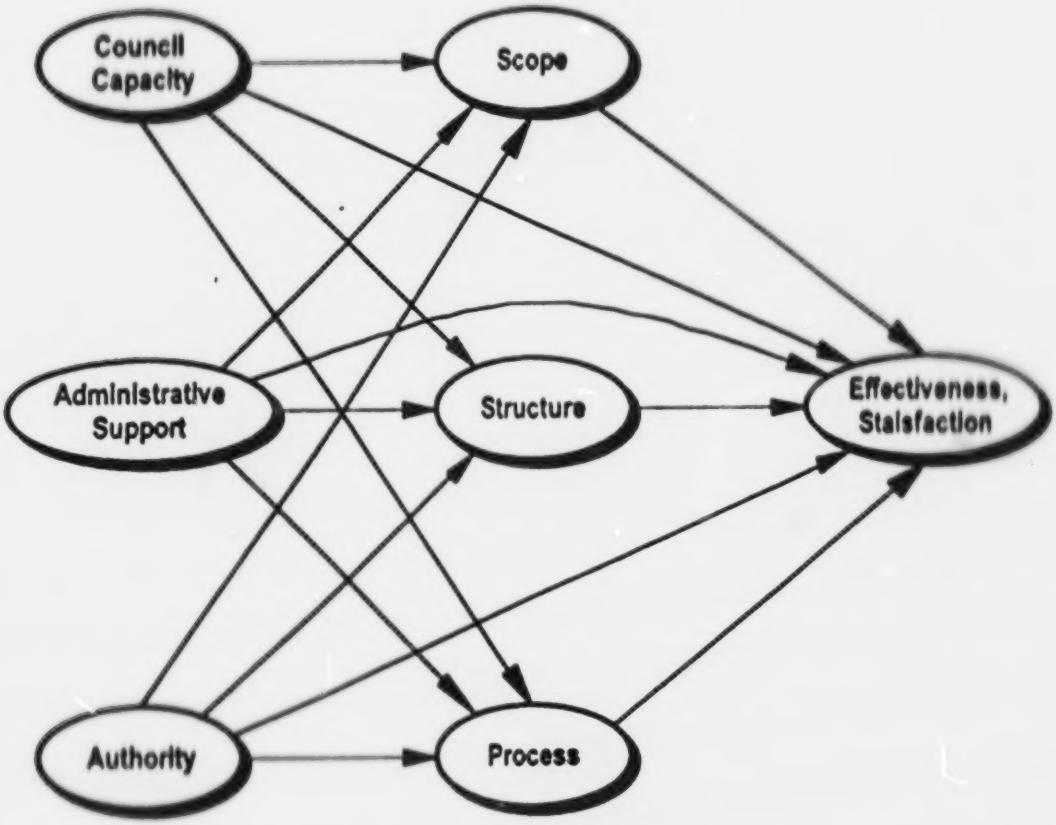

Figure 1: Path Model

BEST COPY AVAILABLE

Statistical Analysis

PLSPath (Sellin, 1989) was used to test the path model. PLSPath uses a partial least-squares approach to estimate the parameters of the path model, and employs a Jacknife subroutine that omits one case at a time (blindfolded) to re-estimate the model parameters on remaining cases. The output shows path coefficients, Jacknife path coefficients, standard errors, and R^2 values for each equation in the model. Partial least-squares has the advantage over other path analysis methods in that no assumptions need be made about the nature of the underlying distributions of observed and latent variables (Sellin, 1989).

PLSPath requires that the data set have no missing values, thus we replaced missing data using mean substitution. It also requires the use of standardized variables, thus z-scores were computed for purposes of this analysis. SPSS-PC was used to conduct the factor analyses and prepare the data set prior to using PLSPath.

Separate path analyses were computed for each of the five outcome measures (effectiveness at providing influence, effectiveness at improving decision making, effectiveness at improving educational services, satisfaction with council, and satisfaction with program). Stability of the models was examined by checking tolerance scores computed by PLSPath as an indicator of possible collinearity problems, and by comparing results of the initial parameter estimates with Jacknife statistics.

Results

Table 2 provides a summary of the results of the analysis testing the path model. Specifically, equations one through three show the effects of the resource variables regressed on the factors relating to site team practice, and the remaining equations show the direct and

TABLE 2 -- RESULTS: PATH ANALYSIS

Equation 1: Dependent Variable = Scope R-squared = .453**			
Independent Variable	**Direct Effect**	**Total Effect**	**Correlation**
Capacity	.29**	.29**	.34**
Admin. Support	.17*	.17*	.21*
Authority	.55**	.55**	.58**

Equation 2: Dependent Variable = Structure R-squared = .177*			
Independent Variable	**Direct Effect**	**Total Effect**	**Correlation**
Capacity	.39**	.39**	.41**
Admin. Support	-.03	-.03	-.02
Authority	.11	.11	.15

Equation 3: Dependent Variable = Process R-squared = .305**			
Independent Variable	**Direct Effect**	**Total Effect**	**Correlation**
Capacity	.55**	.55**	.55**
Admin. Support	.03	.03	.03
Authority	.01	.01	.07

Equation 4: Dependent Variable = Effectiveness at Promoting Influence R-squared = .670**				
Independent Variable	**Direct Effect**	**Indirect Effect**	**Total Effect**	**Correlation**
Capacity	-.01	.42**	.41**	.46**
Admin. Support	.08	.07	.15	.18*
Authority	.19*	.27**	.46**	.51**
Scope	.41**		.41**	.64**
Structure	.35**		.35**	.51**
Process	.29**		.29**	.41**

* significant at the .05 level.
** significant at the .01 level

Equation 5: Dependent Variable = Effectiveness at Improving Dec. Making
R-squared = .660**

Independent Variable	Direct Effect	Indirect Effect	Total Effect	Correlation
Capacity	-.01	.47**	.46**	.51**
Admin. Support	.07	.07	.14	.17*
Authority	.11	.26**	.37**	.43**
Scope	.40**		.40**	.58**
Structure	.33**		.33**	.50**
Process	.41**		.41**	.51**

Equation 6: Dependent Variable = Effectiveness at Improving Ed. Svces
R-squared = .650**

Independent Variable	Direct Effect	Indirect Effect	Total Effect	Correlation
Capacity	.13	.34**	.47**	.52**
Admin. Support	-.06	.08	.02	.05
Authority	.16	.29**	.45**	.50**
Scope	.47**		.47**	.67**
Structure	.27**		.27**	.47**
Process	.18*		.18*	.35**

Equation 7: Dependent Variable = Satisfaction with Council
R-squared = .616**

Independent Variable	Direct Effect	Indirect Effect	Total Effect	Correlation
Capacity	.15	.40**	.55**	.58**
Admin. Support	.06	.07	.12	.15
Authority	.01	.26**	.27**	.33**
Scope	.41**		.41**	.56**
Structure	.28**		.28**	.48**
Process	.32**		.32**	.49**

Equation 8: Dependent Variable = Satisfaction with Program
R-squared = .529**

Independent Variable	Direct Effect	Indirect Effect	Total Effect	Correlation
Capacity	.04	.28**	.32**	.36**
Admin. Support	.25**	.09	.35**	.37**
Authority	.04	.29**	.33**	.39**
Scope	.53**		.53**	.64**
Structure	.03		.03	.19*
Process	.21*		.21*	.29**

BEST COPY AVAILABLE

indirect effects of each of these factors on the five outcome measures.

Equations one through three show that the resource factor dealing with site team capacity is a significant predictor of the scope, structure, and process. In fact, this factor emerges as the lone significant predictor of structure and process. This attests to the importance of such things as the time available for the site council to conduct its work, support from the building principal and other building staff, and having members with the skills and abilities to build consensus and lead teams. In contrast, the other two factors relating to administrative support and authority also emerge as significant predictors, but only for scope. Scope has to do with whether there is consensus on site team goals and the authority teams have; we might expect this to be dependent on support from district administrators and the authority the district vests in site teams. However, when it comes to site council structure and decision making processes, neither administrative support nor formal authority are significant predictors.

Equations four through six show the results for the analyses relating to the outcome factors measuring the perceived effectiveness of site based management. There are some striking similarities across these equations:

- Equation four shows the results for the outcome measure relating to effectiveness at providing influence. The results show that all three measures relating to site team practice have a significant, direct impact on this effectiveness measure, but only the resource factor relating to authority has a direct impact.
- Equation five shows an almost identical pattern with regard to the perceived

effectiveness of site based management at improving decision making. In contrast to the previous results, though, none of the resource factors emerge as having a significant, direct impact on effectiveness in this model, while all three factors relating to council practices emerge as significant predictors.

- Equation six shows the results for the variable relating to the effectiveness of site based management at improving educational services. This factor comes closest to tapping the perceived impact of site based management on teaching and learning. Results show, again, that the resource factors have no significant direct effect on the outcome measure, but all three measures relating to site team practices emerge as significant predictors.

Thus, in all three instances, **the factors relating to the decision making and communications practices of site based councils have significant direct effects on outcomes**, while the factors relating to the resources provided to site based teams do not. However, capacity and authority resources have significant indirect and total effects on perceived effectiveness, indicating that they influence outcomes through the intermediate factors relating to site team communication and decision making practice. Administrative support does not emerge as a significant predictor.

Equations seven and eight show the results for the analyses relating to council member satisfaction with the site based council and with the district's program. Equation seven, which deals with satisfaction with the council itself, shows a familiar pattern: all three factors relating to communication and decision making practices emerge as directly effecting satisfaction, while all three of the resource factors show no direct effect. Again, council

capacity and authority have significant indirect and total effects, while administrative support does not emerge as significant.

The equation dealing with satisfaction with the district's program (equation eight) shows a different pattern of results. In this case, the resource factor dealing with administrative support emerges as having a significant, direct impact on satisfaction, and the other two resource factors emerge as having significant indirect and total effects. The intermediate factors relating to process and scope emerge as having significant direct effects, but the factor relating to structure has no direct impact. These results are interesting in that this outcome measure deals directly with council member feelings about the district program, which may be perceived as somewhat external to their control. The factor dealing with structure has no particular effect on satisfaction with the district's program, although administrative support has a direct one -- it directly effects perceptions about the district program, but it does not have a significant indirect effect through the practice factors. Council capacity and authority influence satisfaction with the district program only through scope, which deals with the enactment of issues associated with goal consensus and influence.

In sum, these models show strong support the notion that the resources provided to site councils primarily impact perceived affectiveness and satisfaction through the factors relating to site council practices. In all five models, the factors relating to council capacity and authority have significant indirect and total effects on the outcomes, working through the practice factors. Most equations show that the factors relating to scope, structure, and process have significant direct effects on outcomes. The factor relating to administrative

support is generally insignificant, except in relation to satisfaction with the district program, and even here, its effect is direct and it does not have an indirect impact on satisfaction through the intermediate variables.

Discussion

There have been few empirical analyses of elements of site based practice that concern how teams actually operate. Instead, team decision making process and setup is generally treated like a "black box." What goes on at site council meetings, how site teams conduct their work, and how site team members perceive various aspects of the "rules of the game," tend to be ignored. Site based practice is deemed "too complex" to operationalize (Malen, Ogawa, and Kranz, 1990b; Wohlstetter and Odden, 1992), thus there are few explications of the specific variables relating to site team practice that are important to the success of site based management.

The initial analysis of these survey data (Bauer, 1997) was intended to begin to address this gap in the research literature on site based management by dealing explicitly with the actual processes site based teams use in their decision making and planning practice. The present analysis extends this work by presenting path models that help us understand some of the complex interrelationships among factors associated with the resources provided to site based teams, decision making and communication practices, and perceived outcomes.

There are several conclusions from this analysis that deserve emphasis. First, factors relating to the design of site based management and the enactment of team processes appear to be quite important in understanding the perceived efficacy of site based management. In

Metro, as in many districts nationwide, site based teams were expected to develop their own rules of operation and the limits on their autonomy was left ambiguous. Site based practice was deemed too complicated to define, and it was assumed that specifying such issues as the degree of authority teams have and the types of issues they should address would in some way deprive teams of needed autonomy. The analysis presented suggests, however, that leaving issues relating to the design of site based management ambiguous or ill-defined may have serious consequences.

This analysis sheds some light on the role of the district in supporting site based management. Until recently, there has been little mention in the restructuring literature on the role of the district in supporting school based changes save for consistent calls for adequate resources. It appears unlikely based on the present analysis that simply providing resources to site based teams would have an impact on outcomes. Instead, these factors may require nurturing in other ways. One suggestion consistent with this analysis is that an important responsibility of the district is to provide a clear picture of the goals and processes of site based management and to aid in the development of communications and decision making skills. Schlechty (1991) remarks:

> ...The act of leadership is, in part, an effort to impose order on chaos, to provide direction to what otherwise appears to be adrift, and to give meaning and coherence to events that otherwise appear, and may be, random (p. 153).

Researchers studying site based management are beginning to recognize that for the process to have a chance, this type of leadership from the school system is needed.

The analysis also has implications for leadership at the school site. Specifically, the "scope" of school leadership may need to be redesigned in order to ensure that adequate time

exists for site councils to meet, discuss, decide, and communicate with the school as a whole on issues pertaining to goals, authority and power. Typically, these are not practices or issues that teachers, parents, and staff see as being their responsibility within schools. That authority and responsibility resides more likely in the person of the school principal. Based on our findings, however, the principal needs to engage in behaviors quite different from directing and telling others what to do and how to do it; instead, the skills of communication and decision making must be acquired by participants in school based management. Lastly, along with the dispersal of power to individuals other than the school principal, comes a dispersal of responsibility. A fear that principals have about sharing power and responsibility is that they alone are held accountable should school improvement efforts not be successful. It is essential that as the nature of school leadership changes to be more collaborative and facilitative, so, too, does schoolwide accountability, including recognition and respect for school council participants.

There are several limitations to this study that warrant attention. First, the models developed using these survey data were at the individual unit of analysis. An argument can be made that it would be more appropriate to create models of the efficacy of site based management at the group or council level. Instead of looking at the effectiveness of site based management in terms of relations among individuals' perceptions, a more appropriate picture of reality would be provided by examining aggregate average perceptions of team members in a school. Second, Metro is a single school system, and thus the analysis presented has limited generalizability. Third, as mentioned earlier, using perceptual outcome data is a limitation of the study. Ideally, outcome data would relate more directly to actual

site team decisions and their impact on student performance and achievement.

Finally, although this study represents a significant step forward in terms of articulating the important variables related to the design and practice of site based, the measures of scope, structure, and process in particular are still quite general. If an understanding of the complexities of site team processes is to have an impact on practice as well as on the development of theory, much more detailed articulation of the these factors are needed. That is, to impact practice, much more explicit conceptualizations of site based management processes as an empirical phenomenon are needed (Gremillon, 1997), the contents of the "black box" must be teased out more fully.

Despite these limitations, the analysis presented suggests that site based councils need more than adequate resources; they need common and realistic expectations and a sense of the limits of site based practice in their district, and they need to attend to issues associated with trust, teamwork and effective decision making. This analysis demonstrates convincingly that site based management practices play a key role in determining the efficacy of site based management, and provides a way to operationalize variables associated with site based practice in future research.

References

Bacharach, S.B., Bauer, S. and Shedd, B. (1986). The work environment and school reform. *Teachers College Record, 88 (2)*, 241-256.

Bauer, S. (1996). *Site based management: A design perspective*. Unpublished doctoral dissertation, Cornell University.

Bauer, S. (In press). Designing Site Based Systems, Deriving a Theory of Practice. *International Journal of Educational Reform*.

Bauer, S. (1997). *Measuring site team practice*. Paper presented at the meeting of the Louisiana Educational Research Association, Baton Rouge, LA.

Cohen, M. (1988). *Restructuring the educational system: Agenda for the 1990's*. Washington, DC: National Governor's Association.

Cotton, J. (1993). *Employee involvement: Methods for improving performance and work attitudes*. Newbury Park, CA: Sage Publications.

David, J. (1989). Synthesis of research on school-based management. *Educational Leadership, 46* (9), 45-53.

Douglass, M. And Douglass, D. (1992). *Time Management for Teams*. New York: AMACOM.

Glickman, C. (1990). Pushing school reform to a new edge: The seven ironies of school empowerment. *Phi Delta Kappan, 72* (1), 68-75.

Glickman, C. (1993). *Renewing America's schools: A guide for school-based action*. San Francisco: Jossey-Bass Publishers.

Gremillon, J. (1997). *Understanding teacher relationships during mandated reform: A micropolitical perspective*. Unpublished doctoral dissertation, University of New Orleans.

Hill, P., Bonan, J., and Warner, K. (1992). Uplifting education: Set schools soaring with site based management. *American School Board Journal, 179* (3), pp. 21-25.

Lindquist, K. and Mauriel. J. (1989). School based management: Doomed to failure?" *Education and Urban Society, 21* (4), 403-416.

Malen, B. and Ogawa, R. (1992). Site based management: Disconcerting policy issues, critical policy choices. In J. Lane and E. Epps (Eds.), *Restructuring the schools: Problems and prospects*. Berkeley, CA: McCutchan Publishing Corp.

Malen, B., Ogawa, R., and Kranz, J. (1990a). Unfulfilled promises: Evidence says site-based management hindered by many factors. *The School Administrator, 47* (2), 30-32, 53-56, 59.

Malen, B., Ogawa, R., and Kranz, J. (1990b). What do we know about school-based management? A case study of the literature - a call for research. In W. Clune and J. Witte (Eds.), *Choice and control in American education, volume 2: The practice of choice, decentralization and school restructuring*. London: The Falmer Press.

Marsh, D. (1994). Change in schools: lessons from the literature. In S. Mohrman, P. Wohlstetter, and associates (Eds.), *Designing high performance schools: Strategies for school-based management*. San Francisco: Jossey-Bass Publishers.

McGonagill, G. (1993). *Overcoming Barriers to Educational Restructuring: A Call for System Literacy*. Arlington, VA: American Association of School Administrators.

Miles, M. and Louis, K. (1990). Mustering the will and skill for change. *Educational Leadership, 47* (8), 57-61.

Mohrman, S. (1994). High involvement management in the private sector," in S. Mohrman, P. Wohlstetter, and associates (Eds.), *Designing High Performance Schools: Strategies for School-Based Management*. San Francisco: Jossey-Bass Publishers.

Murphy, J. (1991). Restructuring Schools: Capturing and Assessing the Phenomena. New York: Teachers' College Press.

Murphy, J. And Beck, L. (1995). *School-based management as school reform: Taking stock*. Thousand Oaks, CA: Corwin Press.

Ogawa, R. And White, P. (1994). School-based management: an overview. In S. Mohrman, P. Wohlstetter, and associates (Eds.), *Designing high performance schools: Strategies for school-based management*. San Francisco: Jossey-Bass Publishers.

Schlechty, P. (1991). *Schools for the twenty-first century: Leadership imperatives for educational reform*. San Francisco: Jossey-Bass Publishers.

Sellin, N. (1989). *PLSPath v. 3.01 Application Manual*. Hamburg, Germany.

Sharpe, F. (1996). Towards a research paradigm on devolution. *Journal of Educational Administration 34* (1), 4-23.

Shedd, J. (1987). *Involving teachers in school and district decision making* Ithaca, NY: Organizational Analysis and Practice, Inc..

Shedd, J. and Bacharach, S. (1991). *Tangled hierarchies: Teachers as professionals and the management of schools*. San Francisco: Jossey-Bass Publishers.

Taylor, D. And Bogotch, I. (1994). School-level effects of teachers' participation in decision making. *Educational Evaluation and Policy Analysis 16* (3), 302-319.

Weiss, C. (1995). The four "I's" of school reform: How interests, ideology, information , and institution affect teachers and principals. *Harvard Educational Review, 65* (4), 571-592.

Wohlstetter, P. And Mohrman, S. (1994). Conclusion: new directions for school-based management," in S. Mohrman, P. Wohlstetter, and associates (Eds.), *Designing High Performance Schools: Strategies for School-Based Management*. San Francisco: Jossey-Bass Publishers.

Wohlstetter, P. and Odden, A. (1992). Rethinking school-based management policy and research. *Educational Administration Quarterly, 28* (4), 529-549.

Wonycott-Kytle, A. and Bogotch, I. (1997). Reculturing: The components of sustainable change in national reform models. Paper presented at the Annual Meeting of UCEA, Orlando.